

Model	DS 141			DS 171			DS 201			DS 241		
Max. overpressure [bar]	7,5	10	13	7,5	10	13	7,5	10	13	7,5	10	13
Rated motor power [KW]	75			90			110			132		
Efficiency load/off-load [%]	95 / 90			95,5 / 90			96 / 91			96 / 91		
Motor speed [rpm]	1500			1500			1500			1500		
Protecting class	IP 55			IP 55			IP 55			IP 55		
Frame construction	B3			B3			B3			B3		
Current input unit appr. (A) [A]												
230 [V] (delta) 50 Hz	256			310			370			453		
400 [V] (delta) 50 Hz	148			179			214			262		
Sep. vent motor aircooled:	B5			B5			B5			B5		
Shaft power [KW]; eta [%]	1,0 / 78			1,75 / 77			1,75 / 77			1,5 / 78 (5,0 / 77)		
Speed [rpm]	1000			1000			1000			1000 (1500)		
Sep. vent motor watercooled:	B5			B5			B5			B5		
Shaft power [KW]; eta [%]	0,4 / 70			0,4 / 70			0,4 / 70			0,4 / 70		
Speed [rpm]	1500			1500			1500			1500		
Unit power input												
aircooled unit [kW] (3)	85,7			103,0			124,7			148,9		
watercooled unit [kW]	85,0			101,3			123,0			147,5		
off-load (A) [KW] (3)	20,1	18,4	16,3	24,8	22,8	20,3	29,5	27,1	24,0	34,6	31,7	28,0

Sigma airend	S 3			S 3			S 3			S 3		
Compressor speed [rpm]	1617	1401	1189	1858	1657	1401	2242	2002	1686	2659	2312	1979
Compressor shaft power (A/W) at max. pressure [KW]	78,26			93,95			114,8			137,8		
Motor shaft output (A/W) [KW]	A/W			A/W			A/W			A/W		
Free air delivery at max. pressure [m³/min]	14,3	12,2	8,9	17,0	14,8	12,2	20,2	17,8	14,7	23,9	20,6	18,0
Specific power at max. pressure [KW/(m³/min)] (1) airc. wc.	5,99	7,03	9,62	6,07	6,94	8,45	6,16	7,03	8,47	6,24	7,24	8,26
Compressor shaft power off-load [KW] (2)	15,0	13,5	11,6	18,0	16,2	14,0	22,0	19,8	17,1	26,4	23,8	20,5
V-belt power loss [KW]	1,90			2,25			2,75			3,3		
Total oil charge [litr.]	83			83			83			83		
Oil consumption [litr./100 h]	0,8	0,7	0,5	1,0	0,8	0,7	1,2	1,0	0,8	1,4	1,2	1,0
Air line connection [G]	DN 65 PN 16			DN 65 PN 16			DN 65 PN 16			DN 65 PN 16		
Electric supply 230[V] 400[V]	Pg 48			2x Pg 48			2 x Ø 75			2 x Ø 75		
No. of cables x cable cross sect. [mm²]	4 x 185			2x4x95			2x4x150			2x4x150		
Cooling water connection [G]	1 1/4			1 1/4			1 1/4			1 1/4		
Cooling water flow f. heating up temp.(diff. t=30K)[m³/h]	2,2			2,7			3,3			3,9		
Cooling water pressure loss at temp. (diff. t=30K)[bar]	0,5			0,6			0,8			1,0		
Installed oil-air separator [litr.]	185			185			185			185		
(Aircooling) temp. diff. compressed air temp. to ambient temp. [Kelvin]	4			5			5			6		
(Watercooling) temp. diff. compressed air temp. to water inlet temp. [Kelvin]	3			3			3			3		
Noise level (A/W) 1m distance at C.P. [dB(A)]	69			70			71			72		
Usable warmed up air, max. (A/W) [m³/h]	9000	4800		14000	4800		14000	4800		14000/(21000)	5000	
max. additional pressure drop for ducts (A/W) [Pa]	100	40		150	40		150	40		150	40	
Cooling air demand for exhauster at stat. pressure (A/W) 1(mbar) [m³/h]	24000	4800		27500	4800		34000	4800		41000	5000	
Intake air apert. (A/W) [m²]	1,7	0,4		2,0	0,4		2,4	0,4		3,0	0,4	

(1) specific power = unit power input [KW] / f. a. d. [m³/min] = [KW/m³/min]

(2) Max. overpressure (p) < 7,5 bar: Compressor shaft power off-load = (0,2 + (7,5 - p) x 0,01) x Rated motor power

(3) data only for low fan speed

A = aircooled unit

W = watercooled unit

data are valid for ambient temperature t = 20°C, 30 % relative humidity, ambient pressure 1013 mbar